

RF Exposure Information.

References: *TCB Training Document*, Session 6, May12-16 2003,
TCB Exclusion List, Appendix A, footnote #3, general population low threshold levels, at
 distances $\geq 2.5\text{cm}$, revised 17 July 2002.

The TCB training document, states that TCB Excl List low thresholds are not appropriate for compliance demonstration of fixed devices, but are used as a secondary check on MPE levels.

This document shows that for a transmit duty factor of 6.3%, the worst-case source based time averaged output power from the TUNet 3205 is 22.714mW below the limits imposed by the referenced TCB Exclusion list.

Typically, the TUNet 3205 operates with a duty factor of 0.3%. However, given a worst-case scenario of network power outage reporting and clearing of accumulated messages followed by a typical transmit occurring within the same 30-minute period, the duty factor would be 6.3%.

Table 1 Radiated Output Power for a TUNet 3205 with 6.3% Duty Factor.

Rated output power.	$\text{Power} := \frac{10^{\frac{37 \text{ dBm}}{10}}}{1000}$	Power = 5 W
Source based time averaged output power of TUNet 3205.	$\text{DF} := 6.3\%$ $\text{Gain}_{\text{ant}} = 1.64$ $\text{ERIP} := \text{Power} \cdot \text{DF} \cdot \text{Gain}_{\text{ant}}$	ERIP = 517.827mW
Source based time averaged output power Low threshold limit.	$\text{Threshold}_{\text{TCB_excl_list}} := \frac{120}{.222} \cdot \text{mW}$	Threshold _{TCB_excl_list} = 540.541mW
Margin below the Low Threshold limit.	$\text{margin} := \text{Threshold}_{\text{TCB_excl_list}} - \text{ERIP}$	margin = 22.714mW